

IN THE UNITED STATES PATENT AND

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GROUP 3600

In re Application of)
Atkinson et al.)
Serial No.: 09/864,339)
Filed: May 25, 2001)
For: Reduced Energy Blasting)
Agent and Method)

Group Art Unit: 3641

Examiner: Edward A. Miller

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

RESPONSE TO FINAL ACTION

Sir:

In the Office Action dated April 23, 2004, the Examiner withdrew his previous final rejection and made a new final rejection of claims 10-11, 13-16 and 18 under 35 U.S.C. 103(a) as being unpatentable over Lawrence et al. in view of Engsbraten, Waldock and Patterson et al., in further view of Guralnik and

Conrad '547. This was after applicants had appealed the previous final rejection and filed their Brief on Appeal.

One reason given by the Examiner for withdrawing the previous rejection is that an examiner cannot rely in an Examiner's Answer on a reference "newly cited by appellants." Actually, the reference in question, Patterson et al., first was cited by applicants in their amendment filed October 21, 2003, and the Examiner signed form PTO-1449, indicating that the reference was considered, and attached a copy thereof to his Advisory Action dated October 31, 2003.

In any event, the Examiner fails to address the claim language and arguments previously set forth several times by applicants that the energy-reducing agent, which can be water, is mixed uniformly and homogeneously into the emulsion blasting agent "to form a second discontinuous phase." This is not simply "watering down" the emulsion blasting agent. By adding the energy-reducing agent in the form of water or aqueous solution to an already formed emulsion blasting agent and mixing it uniformly and homogeneously throughout the emulsified phase to form a second discontinuous phase, not only is the emulsion blasting agent's energy reduced, but also the emulsion blasting agent remains "more sensitive and stable" than if the water or aqueous solution were combined

initially with the inorganic oxidizer salt solution or were not so mixed. (See page ____ of the specification.)

Applicants do not take issue with the Examiner's comments that compositions generally can be varied, even as they are being made and pumped into a borehole. Lawrence et al., Engsbraten and Waldock all disclose, however, adding "dry" ingredients to an emulsion phase. Although Patterson et al. disclose an emulsion composition having a second discontinuous phase, the second discontinuous phase is added as an emulsion, not water or aqueous solution, and thus the resulting composition is a blend of two emulsions. Moreover, the second emulsion phase is added principally to increase stability of the composition, particularly when AN prills are used. (See col. 4, lines 9-19.) Finally, the second emulsion phase is not added as the emulsion blasting agent is being loaded into a borehole, as required in claim 10.

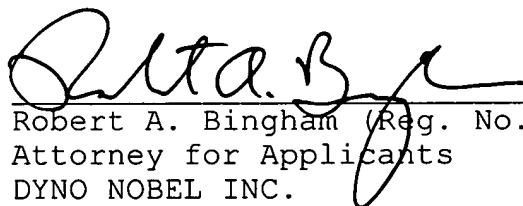
The Examiner goes to length to explain what he means by "watered down," and also that a strong emulsion (explosive) may be later "watered" as desired for diluted strength. Applicants do not take issue with these characterizations or that it would be expected that simply adding water would have this effect. But this is not what applicants are claiming. As stated above, applicants are claiming the mixing of an energy-reducing agent uniformly and homogeneously into an emulsion blasting agent to form a second

discontinuous phase in the claimed amount and for the advantages described above.

Attached hereto is a Rule 132 Declaration from an expert in the field that supports the inventiveness and patentability of the claims.

In view of the foregoing arguments and the attached Declaration, applicants respectfully request allowance of all of the claims.

Respectfully submitted,



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